Filing Date: February 27, 2004

Title: SYSTEMS AND METHODS FOR CREATING PAGE BASED APPLICATIONS USING DATABASE META DATA

REMARKS

This communication responds to the Office Action mailed on July 16, 2007.

Claims 1, 15-18, 20, 22, 28, 34, 48-51 and 53 are amended, no claims are canceled, and no claims are added; as a result, claims 1-4, 6-9, 11-37, 39-42 and 44-56 are now pending in this application.

§103 Rejection of the Claims

Claims 1-4, 6-9, and 11-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Periwal (U.S. 6,163,776).

Claims 16-42 and 44-56 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Periwal (U.S. 6,163,776) in view of Fuller et al. (U.S. 6,877,134).

Since a *prima facie* case of obviousness has not been established by the Office, the Applicant respectfully traverses.

1) The Applicable Law

As discussed in KSR International Co. v. Teleflex Inc. et al. (U.S. 2007), the determination of obviousness under 35 U.S.C. § 103 is a legal conclusion based on factual evidence. See Princeton Biochemicals, Inc. v. Beckman Coulter, Inc., 7, 1336-37 (Fed. Cir. 2005). The legal conclusion, that a claim is obvious within § 103(a), depends on at least four underlying factual issues set forth in Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17 (1966): (1) the scope and content of the prior art; (2) differences between the prior art and the claims at issue; (3) the level of ordinary skill in the pertinent art; and (4) evaluation of any relevant secondary considerations.

Specifically, the Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *See KSR Int'l Co.*, p. 14, citing *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006); *In re Sang Su Lee*, 277 F.3d 1338, 61 USPO2d 1430 (Fed. Cir. 2002).

Therefore, the test for obviousness under §103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of

elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir.1985). The Examiner must, as one of the inquiries pertinent to any obviousness inquiry under 35 U.S.C. §103, recognize and consider not only the similarities but also the critical differences between the claimed invention and the prior art. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), *reh'g denied*, 1990 U.S. App. LEXIS 19971 (Fed. Cir.1990). The fact that a reference teaches away from a claimed invention is highly probative that the reference would not have rendered the claimed invention obvious to one of ordinary skill in the art. *Stranco Inc. v. Atlantes Chemical Systems, Inc.*, 15 USPQ2d 1704, 1713 (Tex. 1990). When the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious. *Id.* p. 4 citing *United States v. Adams*, 383 U.S. 39, 51-51 (1966). Additionally, critical differences in the prior art must be recognized (when attempting to combine references). *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), *reh'g denied*, 1990 U.S. App. LEXIS 19971 (Fed. Cir.1990).

Furthermore, the Court in KSR reaffirmed that "[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of argument reliant upon ex post reasoning." KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 82 USPQ2d at 1397. See also Graham v. John Deere Co., 383 U.S. at 36, 148 USPQ at 474.

2) Application of § 103 to rejected claims - Combining the References Does Not Supply All Claimed Elements:

Claim 1 as currently presented recites "reading metadata for a database, the metadata including a constraint definition for at least one column of the database; translating the metadata into a first page definition language code, the first page definition language code including a translation in accordance with the constraint definition; outputting the first page description language code and integrating the first page description language code with a second page description language code; and generating a page based application based on the first and second page description language code." Claims 19, 20, 22, 28, 34, 50, 51 and 53 as presented recite at least in-part similar language.

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Applicant has reviewed Periwal and can find specifically no teaching or disclosure of "the metadata including a constraint definition for at least one column of the database; translating the metadata into a first page definition language code, the first page definition language code including a translation in accordance with the constraint definition; outputting the first page description language code and integrating the first page description language code; and generating a page based application based on the first and second page description language code (emphasis added)."

Moreover, the Office admits with respect to independent claim 1, "... the reference fails to explicitly state that metadata including a constraint definition for at least one column." The Office goes on to assert that it would have been obvious to one of ordinary skill in the art, having well-known database methods to have modified the storage techniques and utilized distinct columns of the database because it would have further defined the organization and structure of the data in the relational model. However, since there is no evidence in the record to support this assertion, as required by the *In Re Sang Su Lee* court, it appears the Examiner is actually using personal knowledge, and the Examiner is respectfully requested to submit an affidavit supporting such knowledge as required by 37 C.F.R. § 1.104(d)(2).

Therefore, since there is no evidence in the record to support disclosure by Periwal of the above mentioned elements and because the Office has not accounted for the missing elements as a result, a *prima facie* case of obviousness has not been established with respect to independent claims 19, 20, 22, 28, 34, 50, 51 and 53.

Claim 15, as currently presented recites, "wherein translating the metadata into the first page description language code comprises **translating the metadata into a ColdFusion scripting language code** (emphasis added)." The Office Action states that the schema generator shown in Periwal takes the name of the file containing the object-relational mapping information as input, and generates three script files containing the SQL-DDL statements. The Office Action further states that Periwal fails to explicitly state a coldfusion scripting language, and it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified the well known scripting languages as taught by Periwal and provided a user with the additional coldfusion scripting language because it would have provided multiple scripting languages in the translating/exchanging of data. On the contrary, the SQL DDL statements

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identified above by the Examiner pertains to a Data Definition Language (DDL) as opposed to ColdFusion scripting language code which is a page description language as described in dependent claim 15. Typically, a page description language specifies arrangement of page elements which is not possible using a data definition language. Therefore, a prima facie case of obviousness has not been established with respect to dependent claim 15.

Furthermore, claims during examination should be interpreted as broadly as their terms reasonably allow, however, that interpretation must be tempered by the context in which the terms are used. The Hyatt court states that "during examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification." In re Hyatt, 211 F.3d 1367, 1372, 54 U.S.P.Q.2D (BNA) 1664, 1667 (Fed. Cir. 2000) (emphasis added) ("During examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification."; citing In re Graves, 69 F.3d 1147, 1152, 36 U.S.P.Q.2D (BNA) 1697, 1701 (Fed. Cir. 1995); In re Etter, 756 F.2d 852, 858, 225 U.S.P.Q. (BNA) 1, 5 (Fed. Cir. 1985) (en banc)). In this case, the interpretation of ColdFusion as comprising a data definition language is neither reasonable (it does not comport with the understanding of one of ordinary skill in the art), nor consistent with the specification.

Claims 2-4, 6-9, and 11-18 depend either directly or indirectly from claim 1. Claims 23-27 depend either directly or indirectly from claim 22. Claims 29-33 depend either directly or indirectly from claim 28. Claims 35-37, 39-42, and 44-49 depend either directly or indirectly from claim 34. These dependent claims inherit the elements of their respective base claims, and are therefore allowable for the same reasons as discussed above with respect to the base claims 1, 22, 28 and 34. Applicant thus respectfully requests reconsideration and the withdrawal of the rejection of claims 2-4, 6-9, 11-18, 23-27, 29-33, 35-37, 39-42, and 44-49.

Claims 34-56 were stated in the Office Action to recite computer-readable media for carrying out the similar methods claimed in claims 1-18 and were rejected under similar rationale to claims 1-18. Applicant respectfully submits that pending claims 34-37, 39-42, and 44-56 are allowable for the same reasons as discussed above with respect to claims 1-18.

Thus the rejections of claims 1-4, 6-9, 11-37, 39-42, and 44-56 under 35 U.S.C. § 103(a) are improper. Reconsideration and withdrawal of the rejections are respectfully requested.

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RESERVATION OF RIGHTS

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (210) 308-5677 to facilitate prosecution of this application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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Respectfully submitted,

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October 16, 2007

Reg. No. 37,509

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this day of October 2007.

Signature

Name

Date